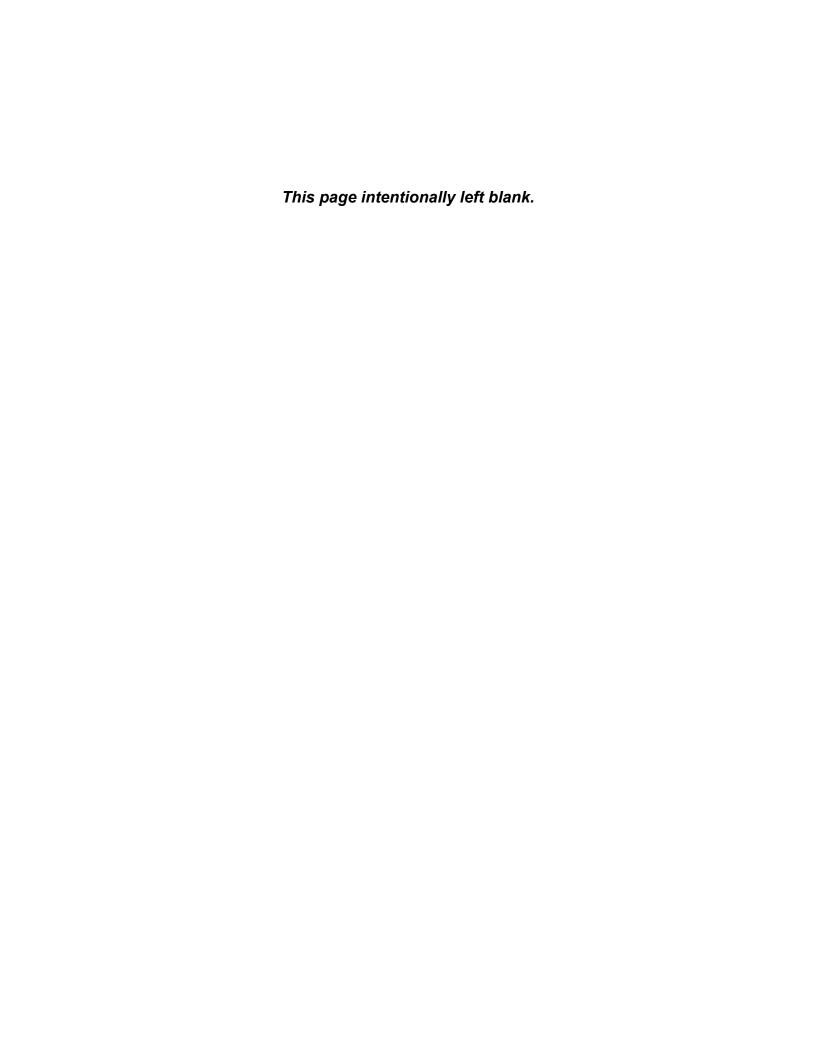
APPENDIX 5

Colorado Canyons National Conservation Area Planning Tools for Recreation



Riding in Rabbit Valley



Recreation Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) is a planning and management tool created by the USDA Forest Service to provide opportunities for the experiences desired by the recreating public. The ROS continuum consists of six land classifications, ranging from a primitive wilderness setting to an urban park setting, with each defined by physical, social, and managerial characteristics (see Figure A-3). When a given planning area is divided into zones with ROS land classifications assigned to each zone, the visitor can determine where to recreate by selecting an area with the land classification that provides the desired setting. The Colorado Canyon National Conservation Area's (CCNCA) planning process uses a modified version of ROS, customized to meet the range of settings available within the planning area. A range of five land classifications has been developed for this planning effort, which includes 1) roaded developed, 2) roaded natural, 3) semi-primitive motorized, 4) non-motorized, and 5) primitive. These classifications are defined in terms of physical, social, and managerial settings and discussed below.

Roaded Developed

Physical Setting:

- May include paved roads and buildings (such as a Visitor Center), but design should blend with natural environment and facilities should relate to the setting.
- Setting is the natural environment although infrastructure is noticeable.

Social Setting:

- Human interaction level is moderate-to-high.
- Access allows for higher number of users.
- Facilities may allow for large gatherings.
- Little risk or need for self-reliance.

Managerial Setting:

- Recreation activities rely on, and are consistent with, the natural setting.
- On-site controls, facilities, and agency presence are noticeable.
- Accessible by normal highway traffic.
- Direction and information are easily available/attainable.

Roaded Natural

Physical Setting:

Roads are not paved.

Figure A-3 Recreation Opportunity Spectrum

- The physical setting is natural with improvements to enhance the experience.
- Facilities should be designed to blend with the natural environment.

Social Setting:

- Human interaction level is low-to-moderate.
- Concentrated use may occur at some locations, such as designated camping areas, parking areas, and trailheads.
- Could include group-use/staging areas for events.
- Low risk; signage and information sufficient to minimize need for selfreliance.

Managerial Setting:

- The recreational experience is based on the natural setting; uses should be consistent with the natural environment.
- Roads may not be maintained for highway vehicles (high clearance may be needed).
- On-site controls present but subtle.

Semi-Primitive Motorized

Physical Setting:

- Predominately natural-appearing environment.
- Signage minimal, and facilities limited to resource protection and safety needs.

Social Setting:

- Level of human interaction is generally low.
- Facilities do not promote large gatherings.
- Element of self-reliance, as access may be difficult and direction/information minimal.

Managerial Setting:

- Roads not maintained for highway vehicles and may require 4-wheel drive.
- Motorized use designed with access in mind as opposed to providing an off-highway vehicle (OHV) experience, although many of the roads may provide a challenging and enjoyable experience for OHV enthusiasts.
- Areas of concentrated use (trailheads, parking areas, and campsites) are limited in size.

• Signage minimal, and agency presence is low; off-site controls preferable.

Non-Motorized

Physical Setting:

- Existing roads are closed and may be converted to trails.
- The setting is the natural environment with facilities and direction provided only as needed.

Social Setting:

- The human interaction level is low-to-moderate; normally low, but may approach moderate where popular trails exist and are easily accessible.
- Where concentrated trail opportunities exist, self-reliance and risk would be relatively low, other than the challenge level of the trail pursuits. Other locations within this zone would require a higher level of self-reliance.

Managerial Setting:

- Motorized use is prohibited, but mountain bike use is allowable on trails specifically designated for that use.
- Areas where high concentrations of trails exist (a system or network)
 would include the necessary on-site controls and information/direction.
- Less concentrated-use areas would provide minimal direction and agency presence, and where feasible, opt for off-site controls.

Primitive

Physical Setting:

- Provided access is limited to trails (no roads).
- Trails are provided only as needed for resource protection.
- Setting is as natural as possible.
- Parking and trailheads are located outside of zone.

Social Setting:

- Human interaction level is rare-to-low.
- Evidence of other users is minimal.
- A high level of risk is assumed, and self-reliance is necessary.

Managerial Setting:

Access is by foot or horseback (no motorized or mechanized use).

- No on-site controls or facilities are provided, except those required for resource protection.
- Agency presence is minimal.

ROS classifications have been assigned throughout the planning area after taking into consideration public recommendations and desires expressed during the planning process, considering potential experiences and benefits for recreational users and the actual geographical settings, along with the "desired future conditions" (DFC) developed for this Resource Management Plan (RMP). Upon completion of the Plan, ROS will serve as a framework for regulating future management of the CCNCA by evaluating the appropriateness of future proposed actions within ROS classified zones. This allows the Bureau of Land Management (BLM) to consider proposals not specifically addressed in this Plan, concurrently providing flexibility and perhaps extending the credible life of the Plan.

Benefits-Based Management

Four of the overall Colorado Canyons National Conservation Area (CCNCA) management plan objectives, discussed in Chapter 2.2, play a critical role in recreation:

- Conserve or enhance recreation opportunities, experiences, and benefits.
- Preserve the existing character of the area.
- Limit all motorized and mechanized use to designated roads and trails.
- Develop a comprehensive program of interpretation and education.

Desired Future Conditions (DFC) were developed for each of the planning zones, based on input from the citizen-based Working Groups, and serve as more specific objectives and guidance for proposed actions. Benefits-Based Management (BBM) is also integrated into the planning process to ensure that the proposed actions are consistent with the needs of the recreating public, thus maintaining or enhancing the desired experiences and benefits derived from participating in recreational endeavors within the CCNCA.

The predecessor to this plan was the Ruby Canyon/Black Ridge Integrated Resource Management Plan (March 1998), which was based on the concept of BBM. BBM planning looks at the outcomes of recreation and leisure activities to determine how the experiences benefit the visitor and uses this information as the premise for the planning process. BBM analyzes the "why" people visit an area and participate in a particular activity. This RMP also incorporates BBM into the planning process, although it is integrated more with traditional planning than in the previous plan.

Much of the information necessary to incorporate BBM into this planning process was gathered and documented by the School of Forestry at Northern Arizona

University. A comprehensive visitor study was conducted at various strategic intervals during 2001 and 2002, with a final report, the *Colorado Canyons National Conservation Area 2001 – 2002 Visitor Study*, published in December 2002 (available for review at the BLM Grand Junction Field Office). A portion of the survey was designed to find out why visitors use the various zones of the CCNCA to participate in their desired activities.

The CCNCA has been divided into four primary zones for planning purposes, with each zone providing a particular niche. Visitors tend to be attracted to particular zones depending on the type of experience they desire and the personal benefits they expect to derive from that experience. To help visitors zero in on what they are looking for, the planning zones are further divided into Recreation Opportunity Spectrum (ROS) classifications (see Figure A-3 above), which define an area based on the physical, social, and managerial settings. The ROS assignment assists the visitor in realizing the experience and benefits desired. See the previous discussion on ROS for more information.

The following is a look at each of the four planning zones within CCNCA from a BBM perspective, first analyzing experiences and benefits, then reviewing the DFC, and finally listing the proposed actions, including those carried forward from the previous Land Use Plan (LUP) and new proposals developed through this planning process.

The data for the experiences and benefits is derived from the results published in the visitor study. Each planning zone is presented to show what the favorite activities are, the experiences derived from participation, and the benefits realized. Although there is a long list of experiences and benefits included in the study, this review looks at the most desired experiences and benefits and the ability to achieve those desires. The scale on the left side of each matrix reflects how important the experience or benefit is to the visitor. The scale on the right side of each matrix rates the ability of the visitor to achieve the desired experience or benefit, participating in their favorite activities in a particular planning zone.

MACK RIDGE PLANNING ZONE

ZONE DESCRIPTION:

Mack Ridge offers a "quiet" (non-motorized) system of trails open to all types of non-motorized use but used almost exclusively by mountain bikes (96%). The area has been managed, as day use only, for the last four years, and the public desire thus far in the planning process is to continue that policy. Visitor use is high in this zone when the weather is agreeable, which is primarily spring and fall.

ROS:

Classifications within the planning zone include Roaded Natural and Roaded Developed for areas that fall within the Interstate (I-70) corridor.

MOST SATISFYING ACTIVITIES:

Mountain Biking
Hiking/Walking/Running

MOST DESIRED EXPERIENCES:

Scale of Importance: -2(least) to 2(most)	Desired Experiences	Ability to Realize 1(low) to 4(high)
1.8	Enjoying strenuous physical exercise	3.7
1.7	Enjoying frequent exercise	3.7
1.6	Enjoying frequent access to a range of physical challenges	3.5
1.5	Savoring area canyon country aesthetics	3.5
1.5	Escaping everyday responsibilities for a while	3.6
1.5	Testing your endurance	3.6

MOST DESIRED BENEFITS:

Scale of Importance: -2(least) to 2(most)	Desired Benefits	Ability to Realize 1(low) to 4(high)
1.7	Improved physical fitness/better health maintenance	3.6
1.6	Increase quality of life	3.3
1.5	Greater sense of overall wellness	3.4

DESIRED FUTURE CONDITION:

When asked what the optimum future setting would be for this planning zone, collaboration with the Working Group produced the following:

- Provide for a mix of non-motorized ("quiet zone") trail opportunities.
- Provide limited motorized use, allowing an access to the Colorado River and a scenic viewpoint overlooking the River, located at the west end of the Mack Ridge planning area.
- In general, motorized use is limited to access parking areas at trailheads.
- Manage the area for day use (no camping facilities).
- New trail development should be limited to enhance the outdoor experience.

COMPARISON OF ALTERNATIVES:

The intent of the Alternatives in regards to recreation is to present viable options for methods of enhancing the ability of visitors to realize the experiences and benefits they desire through activities that are consistent with the resources and settings offered within the Mack Ridge Zone. As can be verified in the included Experiences and Benefits tables, visitors already have a high level of success achieving the experiences and benefits that are important to them, so one of the objectives for the Alternatives is to maintain the current ROS settings.

Alternative 1

The existing opportunities and management within this planning zone are carried forward in order to preserve the current level of realization of experiences and benefits.

Alternative 2

The concept behind this Alternative is to enhance the visitor's ability to achieve desired experiences and benefits by adding new opportunities and making improvements to existing opportunities, facilities, and zone management. Proposed actions will provide users with more up front trail information on-site, alleviate some unsafe conditions, limit motorized use within the trails network, and provide a more diversified spectrum of trail challenge levels.

Alternative 3

This Alternative is similar to, and accomplishes the same results as, Alternative 2 but offers 3 miles less in new trail opportunities and is more restrictive on other allowances in order to enhance the niche opportunities within this area. Actions regarding commercial use and motorized use are more restrictive, and there is more direction for upgrading the management level of natural and developed resources.

Alternative 4

Actions protect and enhance visitor experiences and benefits by preserving the existing highly regarded opportunities and minimizing impacts to the natural environment. Motorized and commercial activities are the most restrictive in this Alternative, and there are no proposals that create new ground disturbance, including new trails. The intent is enhancement through maximizing the quality of existing opportunities and not the quantity.

RABBIT VALLEY PLANNING ZONE

ZONE DESCRIPTION:

The Rabbit Valley Zone offers the most diverse collection of recreational opportunities in the CCNCA. The area accommodates most types of motorized and non-motorized trail use in an agreeable manner. The area is rich in cultural and paleontological resources with interpretive opportunities provided for both. Camping opportunities are available for dispersed use or at several designated primitive campgrounds. Visitors may also enjoy sightseeing, with several overlooks offering breathtaking views of canyons, the Colorado River, and even a panoramic view of the CCNCA's gateway communities.

ROS:

Classifications within this planning zone include Roaded Natural, and a strip of Roaded Developed along the I-70 corridor.

MOST SATISFYING ACTIVITIES:

Motorcycling Mountain Biking Hiking/Walking/Running Horseback Riding

MOST DESIRED EXPERIENCES:

Scale of Importance: -2(least) to 2(most)	Desired Experiences	Ability to Realize 1(low) to 4(high)
1.6	Savoring area canyon aesthetics	3.4
1.6	Escaping everyday responsibilities for a while	3.6
1.5	Releasing or reducing some built-up mental tensions	3.5
1.5	Enjoying easy access to diverse primitive and unconfined outdoor recreation	3.4

MOST DESIRED BENEFITS:

Scale of importance: -2(least) to 2(most)	Desired Benefits	Ability to Realize 1(low) to 4(high)
1.5	Improved physical fitness/better health maintenance	3.4
1.5	Restored mind from unwanted stress	3.4
1.5	Enhanced sense of freedom in being able to get to this special place	3.4
1.4	Increase quality of life	3.2
1.4	Greater sense of overall wellness	3.3
1.4	Renewed human spirit	3.2

DESIRED FUTURE CONDITION:

When asked what the optimum future setting would be for this planning zone, collaboration with the Working Group produced the following:

- There should be a diversity of recreation opportunities provided, consistent with the natural resources of the area.
- Trail opportunities include all traditional uses, including motorized opportunities.
- Maintain the dispersed remote nature of the area:
 - Roads are not paved and are maintained to accommodate normal off-highway traffic; do not improve access to accommodate normal two-wheel drive highway traffic.
- Provide facilities where necessary to accommodate recreation use and provide for resource protection:
 - Sanitation facilities:
 - Information and education;
 - Parking to accommodate larger events; and
 - Camping areas.
- Land health should be restored to the extent possible.
- Acquire inholdings for more effective overall management.
- Feeling of courtesy and respect between users should be nurtured.

COMPARISON OF ALTERNATIVES:

The intent of the Alternatives in regards to recreation is to present viable options for methods of enhancing the ability of visitors to realize the experiences and benefits they desire through activities that are consistent with the resources and settings offered within the CCNCA. As can be verified in the included Experiences and Benefits tables for each planning zone, visitors already have a high level of success achieving the experiences and benefits that are important to them, so one of the objectives for the Alternatives is to maintain the current ROS settings.

Alternative 1

The existing opportunities and management within this planning zone are carried forward in order to preserve the current level of realization of experiences and benefits.

Alternative 2

This Alternative takes the most desired activity in this zone (motorcycling) and greatly enhances the opportunities by creating 16 miles of new trail opportunities and improving the location of an additional 8 miles of sub-standard trail. Other activities are enhanced, to a lesser degree, by providing additional opportunities for all-terrain vehicle (ATV) use, equestrian use, hiking, and target shooting. Other single-track trail users can also utilize the new motorcycle trails. The

priority is to enhance the visitor's ability to achieve desired experiences and benefits by adding new opportunities and making improvements to existing opportunities and facilities.

Alternative 3

Alternative 3 provides most of the motorcycle opportunities included in Alternative 2 but less 5 miles of new trails that could detract from the experience of other users in central Rabbit Valley. New motorized enhancements are mostly located within the western portion of Rabbit Valley where there is logical connectivity to the motorized opportunities across the state line in the neighboring Utah Rims planning area. The Alternative enhances the visitor's ability to realize desired experiences and benefits by providing additional opportunities balanced with preserving the visual and aesthetic quality of the natural setting.

Alternative 4

The proposed actions are aimed more at resource protection than providing recreation opportunities. There are 1.8 miles more in trail closures than in new trail designation. In locations where there are excessive resource impacts due to trail abuse and/or poor trail location, the trails are closed and not relocated. Most of the highly valued opportunities are still available and may be enhanced by an improved physical resource setting.

RIVER CORRIDOR PLANNING ZONE

ZONE DESCRIPTION:

The River Corridor Zone consists of a 24-mile stretch of the Colorado River passing through the CCNCA. This section is classified as "flat water" and provides excellent rafting and boating opportunities. Floaters usually take a couple of days to complete this stretch of river, camping at primitive locations (no facilities provided) along the shore. The corridor is relatively undisturbed and, although it has not been designated as "Wild and Scenic," it was determined to qualify for scenic character.

ROS:

The classification within this planning zone is Semi-Primitive Motorized.

MOST SATISFYING ACTIVITIES:

Rafting Canoeing/kayaking

MOST DESIRED EXPERIENCES:

Scale of Importance: -2(least) to 2(most)	Desired Experiences	Ability to Realize 1(low) to 4(high)
1.8	Savoring area canyon country aesthetics	3.6
1.6	Enjoying easy access to diverse primitive and unconfined outdoor recreation environments	3.5
1.6	Enjoying canyon, river and rock art aesthetics	3.1
1.6	Savoring wilderness aesthetics	3.3
1.5	Enjoying the closeness of family and friends	3.6
1.5	Enjoying exploration	3.3
1.5	Escaping everyday responsibilities for a while	3.7
1.5	Enjoying mental and physical rest	3.5

MOST DESIRED BENEFITS:

Scale of Importance: -2(least) to 2(most)	Desired Benefits	Ability to Realize 1(low) to 4(high)
1.5	Restored mind from unwanted stress	3.2
1.5	Renewed human spirit	3.3
1.5	Increase quality of life	3.4
1.4	Greater sense of overall wellness	3.4
1.4	Enhanced sense of freedom in being able to get to this special place	3.3
1.4	Greater cultivation of outdoor-oriented lifestyle	3.3

DESIRED FUTURE CONDITION:

When asked what the optimum future setting would be for this planning zone, collaboration with the Working Group produced the following:

- Provide for a variety of water-based recreation opportunities.
- Provide for and manage related activities along the River Corridor, such as camping and hiking.
- The social experience may include encounters with multiple other individuals and groups, but not to the extent of feeling congested.
- Physical setting should be as natural as possible.
- Work toward land health improvement:
 - Eradication of invasive species;
 - Conservation of cottonwoods.
- Provide minimal facilities and only where necessary for resource protection.

COMPARISON OF ALTERNATIVES:

The intent of the Alternatives in regards to recreation is to present viable options for methods of enhancing the ability of visitors to realize the experiences and benefits they desire through activities that are consistent with the resources and settings offered within the CCNCA. As can be verified in the included Experiences and Benefits tables for each planning zone, visitors already have a high level of success achieving the experiences and benefits that are important to them, so one of the objectives for the Alternatives is to maintain the current ROS settings.

Alternative 1

The existing opportunities and management within this planning zone are carried forward in order to preserve the current level of realization of experiences and benefits.

Alternative 2, 3, and 4

Proposed actions are similar in all Alternatives. The Desired Future Condition (DFC) for this zone is to avoid changes to the physical environment in order to maintain the current level of realization of desired experiences and benefits. Future management must adapt when the ability to achieve desired experiences and benefits decreases, and/or impacts to the natural environment dictate change. Proposed actions are mostly management techniques for protecting the existing setting, with Alternative 2 being slightly more liberal and Alternative 4 being slightly more restrictive.

WILDERNESS PLANNING ZONE

This zone has been divided into two sub-zones for BBM purposes because of variations in the setting.

SUB-ZONE 1: Rattlesnake Arches/Fruita Front Country

ZONE DESCRIPTION:

Although this area is part of the Wilderness Zone for planning purposes, not all of the area is actually within the Wilderness, and portions that are receive more concentrated visitation than would be normally expected in Wilderness. Rattlesnake Arches is within the Wilderness, but the area is accessed by designated trails and visitation is day use only. The area has spectacular scenery, and Utah's Arches National Park is the only area with a higher concentration of natural arches.

The Fruita Front Country includes access into the Wilderness via a complex of non-motorized trails, which are located both in and out of the Wilderness. This area includes some of the most popular (highest use) hiking trails in the CCNCA. This area is also characterized by urban interface, with community development occurring adjacent to the CCNCA boundary.

ROS:

Classifications within this planning zone include Primitive, Non-Motorized, and Semi-Primitive Motorized. There is a small section of Roaded Natural along the Front Country access road, and a small section of Roaded Developed assigned to Dinosaur Hill.

MOST SATISFYING ACTIVITIES:

Hiking/Walking/Running Horseback Riding

MOST DESIRED EXPERIENCES:

Scale of Importance: -2(least) to 2(most)	Desired Experiences	Ability to Realize 1(low) to 4(high)
1.8	Savoring Wilderness aesthetics	3.5
1.8	Savoring area canyon country aesthetics	3.6
1.7	Escaping everyday responsibilities for a while	3.7
1.6	Releasing or reducing some built-up mental tensions	3.6
1.5	Enjoy frequent exercise	3.5
1.5	Feeling good about being isolated and independent	3.4
1.5	Enjoying easy access to diverse primitive and unconfined outdoor recreation environments	3.4
1.5	Enjoying exploration	3.2

MOST DESIRED BENEFITS:

Scale of Importance: -2(least) to 2(most)	Desired Benefits	Ability to Realize 1(low) to 4(high)
1.8	Increase quality of life	3.4
1.7	Improved physical fitness/better health maintenance	3.5
1.6	Greater freedom from urban living	3.3
1.6	Enhanced sense of freedom in being able to get to this special place	3.4
1.6	Greater sense of overall wellness	3.5
1.6	Renewed human spirit	3.4

SUBZONE 2: Jones, Knowles and Mee Canyons

ZONE DESCRIPTION:

The Jones, Knowles, and Mee Canyons sub-zone offers more of a traditional remote wilderness setting. Fewer trails access the area, and chance encounters are not frequent. On-site controls exist at trailheads and other access outside of the Wilderness boundary. The one unnatural factor is the presence of cattle grazing and related amenities. The canyon country is scenic, and canyon approaches to the Colorado River are awe-inspiring.

ROS:

Classifications within this planning zone include Primitive within the Wilderness, and Non-Motorized and Semi-Primitive Motorized assigned to adjacent access lands.

MOST SATISFYING ACTIVITIES:

Hiking/Walking/Running Nature Study

MOST DESIRED EXPERIENCES:

Scale of Importance: -2(least) to 2(most)	Desired Experiences	Ability to Realize 1(low) to 4(high)
1.8	Savoring Wilderness aesthetics	3.6
1.7	Savoring area canyon country aesthetics	3.7
1.7	Escaping everyday responsibilities for a while	3.8
1.7	Feeling good about being isolated and independent	3.2
1.6	Enjoying easy access to diverse primitive and unconfined	3.9
	outdoor recreation environments	
1.5	Enjoying exploration	3.6

MOST DESIRED BENEFITS:

Scale of	Desired Benefits	Ability to
importance:		Realize
-2(least) to		1(low) to
2(most)		4(high)
1.7	Increase quality of life	3.4
1.6	Improved physical fitness/better health maintenance	3.5
1.6	Greater aesthetic appreciation	3.4

DESIRED FUTURE CONDITION:

When asked what the optimum future setting would be for this planning zone, collaboration with the Work Groups produced the following thoughts, which actually related to the Wilderness and not the Wilderness Planning Zone:

- Maintain the wilderness values.
- Keep the resources in as pristine a condition as possible.
- As a general rule, do not allow motorized or mechanized access.
- Visitors should experience a minimal number of contacts with other visitors.
- Grazing maintained at no higher than the current level.
- Minimal facilities should be provided for visitors:
 - New trails only as needed to prevent resource degradation;
 - Minimal signage;
 - Facilities for parking, information, camping, etc., should be limited and provided outside of the Wilderness boundary.

COMPARISON OF ALTERNATIVES:

The intent of the Alternatives in regards to recreation is to present viable options for methods of enhancing the ability of visitors to realize the experiences and benefits they desire through activities that are consistent with the resources and settings offered within the CCNCA. As can be verified in the included Experiences and Benefits tables for each planning zone, visitors already have a high level of success achieving the experiences and benefits that are important to them, so one of the objectives for the Alternatives is to maintain the current ROS settings.

Alternative 1

The existing opportunities and management within this planning zone are carried forward in order to preserve the current level of realization of experiences and benefits.

Alternative 2

This Alternative promotes enhancement of desired experiences and benefits through more liberal management of the planning zone and less restrictive controls. Some actions would slightly upgrade the existing settings to accommodate visitors. Coordination with the city or Fruita, the Colorado National Monument, and the developing urban-interface community is essential in maintaining the current level of experiences and benefits offered.

Alternative 3

Management and proposed actions maintain the current high level of experiences and benefits by protecting the physical environment and the primitive and semi-primitive settings within the zone. Some proposed actions improve visitor accommodation but curb potential impacts at the same time. Coordination with the city or Fruita, the Colorado National Monument, and the

developing urban-interface community is essential in maintaining the current level of experiences and benefits offered.

Alternative 4

Alternative 4 implements management and proposed actions designed to protect the physical environment to maintain the desired present setting. Coordination with the city or Fruita, the Colorado National Monument, and the developing urban-interface community is essential in maintaining the current level of experiences and benefits offered.

Standard Operating Procedures

The following management guidance applies to and is part of the Proposed Management Prescription, which incorporates the BLM core objective of multiple use, allowing for as wide a range of activity as possible, while protecting the resources for future use and enjoyment. Guidance was set forth, for the long-range protection and management of the CCNCA, in the Colorado Canyons National Conservation Area and Black Ridge Canyons Wilderness Act of 2000 (the CCNCA Act, Public Law 106-353). All Standard Operating Procedures (SOP) are also based on existing laws, regulations, and policy.

Allowable Uses

The public lands will be managed under the principles of multiple use and sustained yield, as required by the Federal Land Policy and management Act (FLPMA). Any authorized use, occupancy, or development of the public lands that conforms to the Resource Management Plan (RMP) will be considered. Those uses; including rights-of-way, leases, and permits; will be subject to environmental review and may require limitations or stipulations to protect and preserve natural resources. Limitations may also be imposed on either the type or intensity of use, or both, because of environmental values, hazards, or special management considerations. Some limitations have already been identified for specific areas and are included in the management objectives in this plan.

<u>Coordination with Other Agencies, State and Local Governments,</u> and Indian Tribes

The BLM will ensure that the detailed management plans and individual projects resulting from the RMP are consistent with officially adopted and approved plans, policies, and programs of other agencies, state and local governments, and Indian Tribes. Cooperative Agreements and Memoranda of Understanding (MOU) will be developed as needed to promote close cooperation between the BLM and other federal agencies, state and local governments, organizations, and Indian Tribes.

Air Quality

Under the Clean Air Act (as amended, 1977) BLM-administered lands were given a Class II air quality classification, which allows moderate deterioration associated with moderate, well controlled industrial and population growth. The BLM will manage all public lands as Class II unless they are reclassified by the state as a result of the procedures prescribed in the Clean Air Act. Administrative actions on the public lands will comply with the air quality classification for that specific area and appropriate State Implementation Plans.

When applicable (activities with the potential to affect air quality), the BLM would determine and document "conformity" with local, state, tribal, and federal air quality laws, regulations, and standards (per 40 CFR 93.100 et seq). Conformity determinations would be included in site-specific activity plans and/or National Environmental Policy Act (NEPA) documentation.

Hazardous Materials

Prevent hazardous materials contamination of public lands:

Minimize releases of hazardous materials through compliance with current regulations. When hazardous materials are released into the environment, assess their impacts on each resource and determine the appropriate response, removal, and remedial actions to take.

Reduce risks associated with hazardous materials on public lands:

Evaluate all actions (including land use authorizations and disposals, mining and milling activities, and unauthorized land uses) for hazardous materials, waste minimization, and pollution prevention.

Complete site-specific inventories when lands are being disposed or acquired. It is departmental policy to minimize potential liability of the Department and its bureaus by acquiring property that is not contaminated, unless directed by Congress, court mandate, or as determined by the Secretary.

Inspect mining and milling sites to determine appropriate management for hazardous materials.

Barrier-Free Access

Access for, and use by, the physically challenged will be considered in all project planning.

Land Acquisition

The BLM will consider acquiring undeveloped inholdings within the Colorado Canyons National Conservation Area (CCNCA) through exchange, donation, purchase, or transfer in order to:

- 1. Facilitate access to public lands and resources.
- 2. Maintain or enhance important public values and uses.
- Maintain or enhance local social and economic values.
- 4. Improve management efficiency through expanding blocks of public lands.
- 5. Facilitate implementation of other aspects of the RMP.

All in-holdings should be acquired if possible as per the CCNCA Act.

Utility/Rights-of-Way (ROW) Exclusion and Avoidance

Utility and transportation development are not normally compatible with the objectives of the CCNCA. Therefore, the CCNCA would be designated as a ROW exclusion area. In rare cases due to public land boundaries and private inholdings, ROWs may be permitted based on consideration of the following criteria:

- 1. Type of, and need for the, proposed facility (local service to inholdings would receive priority consideration).
- Conflicts with other existing or potential resource values and uses, particularly visual resource impacts.
- 3. Availability of alternatives and/or mitigation measures.

Unauthorized Use

It is BLM policy to identify, abate, and prevent unauthorized use of public land. Existing unauthorized uses of public land will be resolved either through termination, temporary authorization by short-term permit, issuance of ROWs, leasing through the Recreation and Public Purposes Act, or other appropriate manner.

<u>Vegetation Management</u>

There will be no sales of vegetation.

Weed Management

Per a Bureauwide policy, feed provided for horses must be weed free.

Wildlife

Wildlife habitat will be evaluated on a case-by-case basis as a part of project-level planning. Such evaluation will consider the significance of the proposed project and the sensitivity and importance of wildlife habitat in the affected area. Stipulations will be attached as appropriate to assure compatibility of projects with management objectives for wildlife habitat. Habitat improvement projects will be implemented where necessary to stabilize or improve unsatisfactory or declining wildlife habitat condition. Such projects will be identified through habitat management plans or project plans.

Threatened, Endangered and Sensitive Species Habitat

Whenever possible, management activities in habitat for threatened, endangered or sensitive species will be designed to benefit those species through habitat improvement.

The Colorado Division of Wildlife and the U.S. Fish and Wildlife Service will be consulted prior to implementing projects that may affect habitat for threatened and endangered species. If a "may affect" determination is made by a qualified BLM wildlife biologist, consultation with the U.S. Fish and Wildlife Service will be initiated in accordance with Section 7 of the Endangered Species Act of 1973, as amended.

Soil and Water Resources

Soil and water resources will be evaluated on a case-by-case basis as a part of project-level planning. Such an evaluation will consider the significance of the proposed projects and the sensitivity of the resources. Stipulations will be attached as appropriate to prevent adverse impacts to soil and water resources. Best management practices will be incorporated into management actions to protect and/or enhance water resources.

Water quality will be maintained or improved in accordance with state and federal standards. State agencies will be consulted, when necessary, on proposed projects that may significantly affect water quality. Water rights and permits, e.g. 404 permits, will be obtained prior to project implementation.

All BLM-initiated or -authorized actions potentially affecting wetland-riparian areas will comply with the spirit and intent of Executive Order 11990 (Protection of Wetlands) and BLM Manual Section 6740.06. These directives stress the avoidance of (1) "... long- and short-term adverse impacts associated with the destruction, loss, or degradation of wetland areas," and (2) the preservation and enhancement of "the natural and beneficial values of wetland areas which may include constraining or excluding those uses that cause significant, long-term ecological damage."

Recreation

A broad range of outdoor recreational opportunities will continue to be provided for all segments of the public. Trails and other means of public access will continue to be maintained and developed where necessary to enhance recreation opportunities and allow public use. Developed recreation facilities receiving the heaviest use will receive first priority for operation and maintenance funds. Sites that cannot be maintained to acceptable health and safety standards will be closed until deficiencies are corrected.

Recreation resources will be evaluated on a case-by-case basis as a part of project-level planning. Such evaluation will consider the significance of the proposed project and the sensitivity of recreation resources in the affected area. Stipulations will be attached as appropriate to ensure compatibility of projects with recreation management objectives.

Visual Resources

Visual Resources Management (VRM) is discussed in Chapter 3, Section 3.18, and class assignments are represented on the accompanying map (Figure 3-16). Visual resources will continue to be managed as discussed, although assignments may be modified if future VRM analysis suggests more accurate ratings.

Visual resources will be evaluated as a part of activity and project planning. Such evaluation will consider the significance of the proposed project and the visual sensitivity of the affected area. Stipulations will be attached as appropriate to maintain visual resources.

Wilderness Resources

The Black Ridge Canyons Wilderness (BRCW) will continue to be managed in compliance with the Wilderness Act of 1964 and the BLM's Wilderness Management Policy.

<u>Cultural Resources</u>

The BLM is required to identify, evaluate, and protect cultural resources on public land under its jurisdiction and to ensure that Bureau-authorized actions do not inadvertently harm or destroy non-federal cultural resources. These requirements are mandated by the Antiquities Act of 1906, the National Historic Preservation Act of 1966 (as amended), the National Environmental Policy Act of 1969, Executive Order 11593 (1971), and the Archaeological Resources Protection Act of 1979, together with 36 CFR 800.

Prior to starting any Bureau-initiated or -authorized action that involves surface disturbing activities, the BLM will conduct, or cause to be conducted, a Class III (intensive) inventory as specified in BLM Manual Section 8111.4. This intensive inventory supplements previous surveys and will be done to locate, identify, and evaluate cultural resource properties in the affected areas. If properties that may be eligible for the National Register are discovered, the BLM will consult with the State Historic Preservation Office (SHPO) and forward the documentation to the Keeper of the National Register to obtain a determination of eligibility in accordance with 36 CFR Part 63.

Since any Bureau-initiated or -authorized action recognizes and accommodates cultural resources by virtue of SOPs, the only activity that may damage these resources is unplanned public use. Such activities include unauthorized recreational vehicle use, artifact collection, and illegal excavation for materials and antiquities. The location of these activities is impossible to predict and may occur in spite of measures designed to eliminate or limit them.

Cultural resource values discovered in a proposed project or authorized action area will be protected by adhering to the following methods:

Avoidance: Cultural resources would be protected by redesigning or

relocating the project or excluding significant cultural resource areas from development, use, or disposal.

Salvaging: If a project cannot be redesigned or relocated, cultural

resource values will be salvaged through controlled, scientific methods pursuant to the SHPO agreement.

Project/Action If the site is determined to be of significant value or the

Abandonment: abovementioned methods are not considered adequate, the

project will be abandoned.

All cultural sites identified as special management areas will be closed to off-road vehicle (OHV) use, vegetation manipulation, and surface occupancy.

All cultural sites known to be eligible for National Register nomination, or listed on the National Register, will be protected from deterioration and be retained in federal ownership.

American Indian human remains will not be held or stored. In accordance with the Native American Graves Protection and Repatriation Act, remains and/or grave goods will be returned to the appropriate tribe upon their written request. (No items are currently known to exist in the CCNCA inventory.)

Inadvertent field discovery of American Indian human remains and/or grave goods will not be disturbed until the appropriate tribe is notified. All activity

around the discovery will be halted, in accordance with the Native American Graves Protection and Repatriation Act, until the tribe has determined their recommendations.

American Indians may gather or tend traditional native plants or materials for personal use and/or use for traditional religious sites without obtaining a special use permit. Non-native plants may not be introduced. American Indians will be asked to inform the Grand Junction Field Office staff if they are gathering, tending, or using traditional religious sites in the CCNCA to avoid the possibility of conflict with visitors who may not understand the activity occurring and perceive or report to the BLM that unauthorized collection or use is occurring. (No traditional religious sites are currently known to exist in the CCNCA inventory.)

Paleontological Resources

Paleontological resources will be managed to protect specimens and maintain or enhance sites or areas for their scientific and educational values.

The potential impacts to the paleontological resources of the CCNCA are unknown, as an inventory has not yet been completed. Once an inventory is completed and site clearance becomes standard practice, with any needed monitoring and mitigation, and with further public education efforts, the resource will be adequately protected.

Cadastral Survey

Cadastral surveys will be performed when needed in support of resource management programs. Survey requirements and priorities will be determined on a yearly basis as a part of the annual work planning process.

Site-Specific Project Plans

The RMP provides general guidance for the CCNCA. More detailed management plans, called "project plans," will be prepared to deal with site-specific resource projects. Project plans include a detailed plan for completion of a particular project and an environmental assessment to evaluate any potential resource impacts.

Economic and Social Considerations

The BLM will ensure that any management action undertaken in connection with this Plan is cost-effective and takes into account local social and economic factors. Cost-effectiveness may be determined by any method deemed appropriate by the Bureau for the specific management action involved.

Environmental Review

Prior to implementation of proposed projects, a review will be done to determine if criteria is met for a categorical exclusion. Projects not meeting the criteria will require an Environmental Assessment (EA) with a Finding of No Significant Impacts (FONSI). If the assessment suggests a major federal action that would significantly affect the human environment, an Environmental Impact Statement (EIS) will be prepared under the direction of the BLM Colorado State Director. An EIS was prepared for this RMP and environmental consequences are discussed in Chapter 4.

Standard Design Practices

Standard Design Practices (SDP) are design features, reclamation measures, and procedures that may be applied to projects proposed by BLM; other federal, state and local agencies; or private industry. SDPs will be used to satisfy requirements of law for protection of resource values and/or to achieve goals in this plan.

The SDPs listed in this appendix are not all inclusive. That is, practices other than those included here may also be applied to proposed projects if they are consistent with goals in this plan. The listing is arranged by the type of action to which an SDP would be applied. SDPs are flexible and negotiable. That means they may be applied, waived, or altered at the discretion of the resource area manager. SDPs may be reworded or changed to fit a particular project. SDPs for a particular project will be selected in consultation with the project initiator. Only those SDPs applicable to a given project will be selected. If more than one SDP will achieve a desired result, the least costly SDP will be selected.

STANDARD DESIGN PRACTICES FOR ALL PROPOSALS

- 1. No surface-disturbing activities shall be allowed on the following lands in order to protect sensitive resources:
 - a. Lands with 40 percent slope or greater.
 - b. Grand Junction municipal watershed.
 - c. Fruita Paleontological Site RNA, Rabbit Valley Paleontological Site RNA.
 - d. Class I and II visual resource management areas (Ruby Canyon).
 - e. Actively managed cultural resource sites (Sieber Canyon, McDonald Creek).
 - f. Black Ridge utility corridor.
 - g. Lands within 100 feet of perennial streams, except for essential roads and utility crossings.
 - h. Elk calving sites.
 - i. Critically eroding soils.

- j. Riparian areas.
- Special design and reclamation measures may be required to protect the outstanding scenic and natural landscape values of the CCNCA. Special design and reclamation measures may include transplanting trees and shrubs, fertilization, mulching, special erosion control structures, irrigation, site recontouring to match the original contour, buried tanks and low profile equipment, and painting to minimize visual contrasts. Surface-disturbing activities may be denied in sensitive areas, such as unique geologic features and rock formations, visually prominent areas, and high recreation-use areas.
- 3. The CCNCA Manager will be notified at least 24 hours prior to commencing reclamation work, construction, or maintenance activities.
- 4. All construction activities shall be confined to the minimum area necessary. The exterior boundaries of the construction area shall be clearly flagged prior to any surface-disturbing activities.
- 5. Prior to cutting any fence along a right-of-way, the fence shall be firmly braced and tied to prevent slacking the wire. All braces shall be permanent H-frame construction. Upon completion of construction, the grantee shall rebuild and maintain the fence in accordance with BLM standards.
- 6. An H-20 cattle guard, base, and adjacent gate will be installed. The guard will be constructed to the specifications of BLM drawing number 02457-4, and the base will be constructed to the specification of BLM drawing number 02457-1, 2, or 3.
- 7. The constructor shall clear all vegetation from the project area, where clearing is necessary, prior to any construction. All clearing work shall be completed without mixing soil with the vegetation.
- 8. All trees requiring removal shall be disposed of by the grantee. Where earth blading is required, stumps shall be removed and scattered or buried in an area designated by the authorized officer. Where earth blading is not required, stump height shall not exceed 12 inches. All slash less than 4 inches in diameter will be chipped, scattered outside the cleared area, or stockpiled for use during reclamation as directed by the authorized officer. All material 4 inches in diameter and greater will be removed from federal land unless otherwise directed. A wood permit from BLM for the wood removed will be required prior to any clearing.
- 9. All aboveground facilities shall be painted to blend with the surrounding area.

- 10. Backslopes shall be constructed no steeper than (as specified, ranging from 1-1/2:1 to 3:1, run:rise). Round the upper edges of all cutbanks.
- 11. Trash will be confined in a covered container while the project is in progress. Upon completion, all trash, flagging, laths, etc., will be removed and hauled to an authorized disposal site. No oil or lubricants shall be drained onto the ground surface.
- 12. Drainages shall not be blocked or filled with loose dirt or debris. All drainage crossings shall be properly excavated an/or have a culvert of sufficient size installed to adequately carry the flow of a 25-year flood.
- 13. All soil erosion associated with the operation must be stabilized to a condition at least equal to that present before disturbance.
- 14. For projects requiring long-term surface occupancy (producing wells, facility sites, permanent roads, etc.), access roads will be upgraded and maintained as necessary to prevent soil erosion and accommodate year-round traffic; all disturbed areas unnecessary to operations will be stabilized, and all disturbed areas outside the work area will be seeded according to the BLM-approved seed mixture. For projects requiring short-term surface occupancy, or abandoned projects (dry wells, pipeline) all disturbed areas will be stabilized and seeded according to the BLM-approved seed mixture; all compacted areas will be ripped or disked prior to seeding.
- 15. All disturbed areas will be seeded with the seed formula approved by the CCNCA Manager. A seedbed will be prepared by contour cultivating 4 to 6 inches deep where possible. Drill seed ½ to ½ inch deep. In areas that cannot be drill seeded, broadcast seed using one and one-half times the recommended drilling rate and cover ¼ to ½ inch deep using a harrow, drag bar, or chain. Seeding must be completed after August 15 and prior to October 1 above 6,500 feet elevation, and after September 1 and prior to October 15 below 6,500 feet elevation. Seeding of disturbed areas is required wherever the level of disturbance has resulted in significant vegetation losses. Disturbed areas will be considered satisfactorily revegetated when the percent vegetative cover at least equals the cover present prior to disturbance, and the plant species composition is at least as desirable as that present prior to disturbance.
- 16. Existing roads will be used wherever possible. Additional roads shall be kept to the minimum. Route locations must be approved by BLM prior to construction.

- 17. For small culverts (less than 36 inches in diameter): All fill material will be placed in layers not exceeding 6 inches. Fill material will be compacted with a hand compactor 12 inches on both sides and above the culvert. Fill outside of the 12-inch limit shall be placed in 6-inch lifts or less and compacted with a rubber-tired vehicle or using other standard compaction methods.
- 18. Prior to installation of large culverts (more than 36 inches in diameter), existing material will be removed to a depth 2 feet below the natural streambed. This material shall be replaced with a well graded 3/4-inch minus material. On each side of the culvert there will be an area of 3/4-inch minus material at least 3 feet wide or the width of the streambed, whichever is greater. The total depth of the 3/4-inch minus material must cover the diameter of the pipe plus 1 foot. All fill will meet the following compaction standards:
 - a. A gradation curve and proctor analysis for the 3/4-inch minus fill and a proctor analysis on the native fill will be supplied to the BLM prior to any construction on the drainage crossing.
 - All fill material will be placed in layers not exceeding 6 inches.
 - c. Compaction will be 95 percent of maximum density as identified by the proctor analysis.
 - d. The compaction will be tested after the placement of each 6-inch layer as per A.A.S.H.T.O. T.99 method C or D.
 - e. A BLM engineering representative will conduct the compaction testing if time is available, or the operator may acquire the appropriate tests from a certified professional engineer.
- 19. Culvert invert(s) shall be installed at the elevation of the natural streambed. The up- and downstream fill slopes will be rip rapped with a well graded mixture of rock sizes containing no material greater than 2 feet or smaller than 3 inches. The ratio of maximum to minimum dimension of any rock shall not exceed 6:1.
- 20. Where practical, known important habitat sites of sensitive animal and plant species and communities will be protected from surface-disturbing activities.
- 21. A pesticide use proposal must be submitted and approved by the authorized officer prior to the use of any pesticides.

- 22. Low water crossings will be used during road construction across drainages whenever possible.
- 23. (Fill in depth) inches of topsoil will be stripped and stockpiled. Stockpiled topsoil will be evenly distributed over the disturbed area prior to seeding. No topsoil stripping will be allowed when soils are moisture saturated or frozen deeper than the depth to be stripped.
- 24. All disturbed areas will be contoured to blend with the natural topography. Blending is defined as reducing form, line, and color contrast associated with the surface disturbance so that the project area will fit into the natural landscape as much as possible. In visually sensitive areas and wilderness areas, all disturbed areas will be contoured to match the original topography. Matching is defined as reproducing the original topography of the disturbed area and eliminating form, line, and color contrast as much as possible.
- 25. Roads will be constructed and maintained to BLM road standards (BLM Manual Section 9113). All vehicle travel will be within the approved driving surface.
- 26. During periods critical to bighorn sheep, deer, and elk, the following restrictions will be applied: (I) No new construction activities will occur; (2) All activities will be conducted during daylight hours only; (3) Vehicular access on a daily basis will be limited to a single trip. Critical periods are as follows:
 - a. Bighorn winter range December 1 to May 1
 - b. Deer and elk winter range December 1 to May 1
 - c. Elk calving May 15 to June 15
- 27. On sites where the ability to achieve acceptable reclamation is reduced because the existing topsoil has been lost or mixed with less desirable material during the course of the project, enough good quality topsoil to cover the disturbed area (specify depth in inches) will be hauled in and distributed. This will be applied only to visually sensitive areas and wilderness areas.
- 28. The amount of rock greater than 2 inches in diameter present in the upper 6 inches of the replaced topsoil will not exceed the amount present prior to disturbance. Excess rock must be removed to an approved disposal site.
- 29. In areas where ground water contamination may be a problem, all sewage and human waste will be removed from the site and taken to an approved disposal facility. Bore hole disposal may be used where contamination is not a problem. Bore holes must be fenced or covered at all times to

eliminate safety hazards. Where woodland or forest vegetation was present prior to disturbance, tree species will be reestablished. Pinyon and juniper will be included in the seed mixture; Douglas fir and ponderosa pine seedlings will be planted as directed by the authorized officer.

STANDARD DESIGN PRACTICES FOR POWER LINE PROJECTS

- Unless otherwise agreed upon in writing, power lines shall be constructed according to standards as outlined in Suggested Practices for Raptor Protection on Power Lines, Raptor Research Foundation, Inc., 1981. Industry officials shall assume the burden and expense of proving that pole designs not shown in publications are eagle safe. Such proof shall be provided by a raptor expert approved by the authorized officer. The BLM reserves the right to require modifications or additions to all power line structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the BLM.
- Holder shall coordinate with the authorized officer on the design and color of the poles and transmission line to achieve the minimum practicable visual impacts.
- 3. Structure holes left open overnight shall be covered. Covers shall be secure and strong enough to prevent livestock or wildlife from falling into holes.
- 4. Holder shall not blade or excavate to prepare a structure framing pad. If a structure cannot be framed on the natural ground, aerial framing or off-site framing will be necessary.